

REMARKS

Claims 1-2, 6-8, 10-11, and 17-22 are amended, no claims are canceled, and no claims are added; as a result, claims 1-2 and 6-23 are now pending in this application.

No new matter has been added by the amendments to claims 1-2, 6-8, 10, and 17-22, wherein support for the amendments to claims 1-2, 6-8, 10, and 17-22 is found in the specification for example at page 7, lines 1-25. Further support for the amendments to claim 2 regarding the "device programmer" and to claim 8 regarding "a wireless transceiver" is found in the specification for example at page 3, line 16 through page 4, line 18.

Double Patenting Rejection

Claims 1, 2, and 6-23 were rejected under a non-statutory, obviousness-type double patenting rejection, specifically over claims 1-24 of U.S. Patent No. 6,687,539. Claims 1, 2, and 6-23 were rejected under a non-statutory, obviousness-type double patenting rejection, specifically over claims 1-7 of U.S. Patent No. 6,304,778.

Applicants do not admit that claims 1-2 and 6-23 are obvious in view of claims 1-24 of U.S. Patent No. 6,687,539, or that claims 1-2 and 6-23 are obvious in view of claims 1-7 of U.S. Patent No. 6,304,778. Applicants will revisit the issue and, if appropriate, submit a terminal disclaimer to obviate these rejections when the claims in the application are otherwise considered allowable.

§102 Rejection of the Claims

Claims 1, 2, 8, 11-15, 17-19, 22, and 23 were rejected under 35 U.S.C. § 102(e) for anticipation by Struble et al. (U.S. Patent No. 6,122,545).

Applicants respectfully traverse the rejection because Struble fails to identically meet each and every requirement of claims 1, 2, 8, 11-15, 17-19, 22, and 23, at least as these claims are now amended.

For example, Struble fails to meet independent claim 1's requirement of:

"circuitry for blanking sensing of atrial electrical signals in the monitoring circuitry for a period of time following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber blanking settings."

In contrast to independent claim 1, Struble is concerned with, "the possibility exists that a *pacing pulse* will be delivered across the above-described right or left heart chamber pace/sense electrodes, *and the delivered pacing pulse energy will appear across the other set of pace/sense electrodes* masking the conducted P-wave or R-wave."¹ (Emphasis added). Thus, Struble concerns pacing pulse energy appearing at the pace/sense electrodes, and thus masking the conducted P-wave or R-wave. Struble further states:²

"This is particularly the case when relatively short CDW times are programmed to optimize timing of the synchronous depolarization of the right and left heart chambers and conventional high gain sense amplifiers are employed. Thus, **each sense amplifier for each pacing channel will require its own specific programmable blanking periods to avoid this problem and the problem of saturation of the sense amplifiers.** For conventional, high gain sense amplifiers, the blanking periods are programmed in the range of 100 msec. Much shorter blanking periods can be used with the FDC sense amplifiers. Refractory periods of the sense amplifiers are also programmable in the range of 20-350 msec for atrial channel sense amplifiers and 150-500 msec for ventricular channel sense amplifiers. During the refractory periods, sensed events will not be allowed to reset the pacing escape interval or AV delay being timed out." (Emphasis added).

Thus, the programmable blanking periods in Struble are intended to avoid the problem of pacing pulse energy appearing across the pace/sense electrodes and thus masking a conducted P-wave or R-wave. However, such a description fails to identically meet the requirement of independent claim 1 of "circuitry for blanking sensing of atrial electrical signals in the monitoring circuitry for a period of time following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber blanking settings." Because Struble fails to meet this requirement, it does not anticipate claim 1.

Similarly, Struble fails to meet all the requirements of independent claims 2, 8, 11, 17, and 22. Independent claim 2 requires "a cross-chamber-blanking module for disabling sensing

¹ See Struble at column 25, line 64 through column 26, line 2.

² See Struble at column 26, lines 2-18.

signals at either the first or second lead for a preset time period following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber-blanking settings."

Independent claim 8 requires "a cross-chamber-blanking module responsive to at least one of the one or more cross-chamber-blanking settings for disabling sensing signals at the first or second lead or for ignoring signals at the first or second lead for a time period following sensing a last ventricle beat of the heart and based on at least one of the stored cross-chamber blanking settings."

Independent claims 11 and 17 require "a cross-chamber-blanking module for disabling sensing signals at either the first or second lead for a preset time period following a sensing of a last ventricle beat of the heart and based on at least one of the cross-chamber-blanking settings."

Independent claim 22 require "a cross-chamber-blanking module for disabling sensing signals at either the first or second lead for a preset time period following sensing a last ventricle beat of the heart and based on at least one programmable cross-chamber-blanking setting."

Thus, at least these requirements of independent claims 2, 8, 11, 17, and 22 are not anticipated by Struble.

Claims 12-15, 18-19, and 23 depend from one of independent claims 11, 17, and 22. Thus, they distinguish from Struble for at least the reasons highlighted above for independent claims 11, 17, and 22.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §102 rejection of claims 1, 2, 8, 11-15, 17-19, 22, and 23.

§103 Rejection of the Claims

Claims 6, 7, 10, 16, 20, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Struble in view of Wickham (U.S. Patent No. 5,891,171). Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Struble in view of van Lake (U.S. Patent No. 5,653,737).

Applicants respectfully traverse these rejections of claims 6-7, 9, 10, 16, and 20-21. Applicants respectfully submit that each of these proposed combinations,³ even if permissible, do

³ Applicants do not admit or agree that any combination or combinations of Struble, Wickham, and Lake are possible.

not meet all the requirements of claims 6-7, 9, 10, 16, and 20-21 because these extended combinations erroneously rely on Struble to meet the requirements of the independent claims from which claims 6-7, 9, 10, 16, and 20-21 depend.

As documented above, Struble fails to meet the requirements included in, for example, independent claims 1, 2, 8, 11, 17, and 23. For analogous reasons, Struble fails to meet the requirements included in any one of claims 6-7, 9, 10, 16, and 20-21.

The addition of Wickham and Lake fails to remedy these deficiencies in Struble. Thus, one of skill in the art would not regard any of these proposed combinations, as presented in the Final Office Action and as used the rejections of claims 6-7, 9, 10, 16, and 20-21, as meeting all of the requirements of claims 6-7, 9, 10, 16, and 20-21. Therefore, claims 6-7, 9, 10, 16, and 20-21 are not obvious in view of the proposed combinations used in the Final Office Action in the rejections of these claims.

Accordingly, Applicants request respectfully that the Examiner reconsider and withdraw the §103 rejections of claims 6-7, 9, 10, 16, and 20-21.

Reservation of Rights

In the interest of clarity and brevity, Applicants may not have addressed every assertion made in the Final Office Action. Applicants' silence regarding any such assertion does not constitute any admission or acquiescence. Applicants reserve all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicants do not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicants timely object to such reliance on Official Notice, and reserve all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicants reserve all rights to pursue any cancelled claims in a subsequent patent

application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at (612) 371-2132 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 16 day of April 2008.

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